### Did You Know

### Strategic Initiatives for Inclusive Development\*

**4.1** Along with sectoral policies aimed at improving livelihood support and increasing employment, a strategy of inclusiveness also calls for new emphasis on education, health, and other basic public facilities. Inadequate access to these essential services directly limits the welfare of large sections of our population, and also denies them the opportunity to share fully in the benefits of growth. Indeed,

inadequate attention to human resource development limits the growth process itself.

#### 4.2 Child Nurture: Starting Right

4.2.1 Any strategy for removing disparities, bridging divides, and ensuring the well-being of our people, must begin by respecting the rights of our child population. Rights based development of children must be at the

### Box No. 6

### Child Nurture - Starting Right

Development of children is at the centre of the 11<sup>th</sup> plan. We are committed to ensure that our children do not lose their childhood because of work, disease or despair. We aim to give the right start to children from 0-6 years with effective implementation of the ICDS programme. It is to be a community based programme involving parent groups. The nutrition component has to have imaginative menus based on seasonal and regional variations. The scheme will nurture and strengthen pregnant and lactating mothers. Currently, the pre-school component of ICDS centres is very weak. Early Childhood Education (ECE) could be placed under the SSA. The ICDS centres then will concentrate on inculcating good health and hygienic practices among the children. For this it will be essential that these centres have toilets and drinking water. The elders of the community could be asked to visit the children on a weekly basis to narrate folk tales, poetry etc. which are often missing from school's curriculum. This will serve the dual purpose of enriching the child and making the elderly feel part of the education process.

<sup>\*</sup>Chepter 4, Towards Faster and More Inclusive Growth,

<sup>11</sup>th Five Year Plan (2007-2012), GOI, Planning Commission

centre of the 11<sup>th</sup> plan. We must ensure that our children do not lose their childhood because of work, disease or despair.

4.2.2The Integrated Child Development Programme (ICDS) is aimed at giving children below the age of 6 the right start in life (see Box). The programme covers supplementary nutrition, immunisation, monitoring of weight and height, and in some cases, crèche facilities for a limited period. The effectiveness of the programme varies across States but where it works well, it provides much needed facilities especially to the weaker sections. Its coverage, however, is limited and often the youngest children in the 0-3 years age group get left out of its ambit. The 11<sup>th</sup> Plan must universalise ICDS and also find practical ways of reaching out to the children in the 0-3 age group. Strong efforts also need to be made to improve accountability through greater involvement of PRIs.

4.2.3 Meeting the nutritional needs of children however is not enough. Child's mental health is a much neglected area in our country. According to the ICMR, at any given time, 7-15% of Indian children suffer from mental disorders. It is thus vital to provide counselling services for children in all schools – private or public – to ensure their wellbeing. Mental health must be made an integral part of the school health programme in the 11<sup>th</sup> Plan.

4.2.4 School is an important element of a child's development. The Sarva Shiksha Abhiyaan (See Section 4.3) aims at providing elementary education to all children in the 6-14 years age group. Children from socially disadvantaged families often have learning difficulties since, among other things, their vocabulary at entry to primary school is limited. Special help in pre-Primary schools can help them overcome this handicap. Efforts must be made to mainstream differently-abled and other disadvantaged children and to provide them access to education, just like other children their age.

4.2.5 The most vulnerable such as street children, trafficked children, children affected by conflict or calamities, children of sex workers, child labourers, children with HIV/ AIDS, victims of child sex abuse, differently-abled children, and juvenile delinquents need special attention. Adoption, rescue and rehabilitation, juvenile police units, shelter homes, counseling and medical aid etc., also need attention as they contribute to ensuring a secure childhood to children.

## 4.3 Empowerment Through Education

4.3.1 Education, in its broadest sense of development of youth, including sports, is the most critical input for empowering people with skills and knowledge and for giving them access to productive employment in the future. The 11<sup>th</sup> Plan should ensure that we move towards raising public spending in education to 6% of GDP, which is an NCMP commitment. It must fulfill the Constitutional obligation of providing free and compulsory elementary education of good quality to all children up to the age of 14. This means we must ensure both access and good quality and standards in respect of curriculum, pedagogy, and infrastructure irrespective of the parents' ability to pay.

#### (a) Elementary Education: Sarva Shiksha Abhiyan (SSA)

4.3.2 The Sarva Shiksha Abhiyan seeks to provide elementary eduation to all children in the 6-14 years age group by 2010. It also aims to bridge all social, gender, and regional gaps with the active participation of the community in the management of schools. This is a flagship programme and a 2% education cess has been levied on all taxes and earmarked to fund this programme.

4.3.3 Expanding enrolment has been one of the major objectives of the SSA and an almost 100% enrolment of 6-14 years old is likely to be achieved by the end of the 10th plan. Enrolment, however, is only the first step. Children must also complete eight years of schooling and this continues to present a major challenge. The drop- out rate in primary schools for the country as a whole was around 31% in 2003-04 and it was much higher in many states. Dropout rates for both boys and girls of all social groups must be reduced sharply, if not eliminated altogether.

4.3.4 High drop - out rates are the result of a combination of factors. A school that is far away or that does not function regularly fails to retain students. Similarly, a teacher who is absent or engaged in non-teaching work, is intimidating or uses uninteresting methods of teaching also encourage children to drop out. Often the need for children of poorer femilies to work also drives them away from school. With the **Employment Guarantee Scheme adding** to family income, these pressures are expected to somewhat reduce. Opening of creches for children at the work site will reduce the incidence of girls dropping out to take care of younger siblings. The experience of many NGOs, in both rural and the urban areas, has shown that child workers can be mainstreamed into education through camps that hook them on to good education after withdrawing them from work. Well run residential schools in regions of extreme poverty keep the children from living on streets or railway platforms or joining the work force prematurely.

4.3.5 Experience has shown that the Mid-day Meal Scheme can help increase attendance and improve the children's nutritional status. It also helps in removing caste barriers as all children sit together for their meals... SHGs formed by mothers should be given the task of preparing mid-day meals. This will guarantee better quality food. Wherever possible, particular attention should be paid to the scope for using the MDMS to tackle micro-nutrient deficiencies through nutrient supplementation and provision of fortified foods. Management and supervision mechanisms must be improved and changes in the nutritional status of

<sup>2</sup> Annual Status of Educauon (ASER) -Rural 2005 facilitated by Pratham

children monitored regularly. School health programmes must be revived and converged with MDMS and MDMS itself merged with the SSA at an appropriate time.

4.3.6 The pre-school education component of ICDS-Anganwadi at present is very weak and the repetition rate in primary classes is, therefore, quite high. This in turn, discourges many students from continuing their education. The SSA should also have a separate component for at least one year. Early Childhood Education (ECE) which can be universalised in a phased manner.

4.3.7 The most difficult task is to ensure good quality of instruction. A recent study<sup>2</sup>, (ASER, 2005) has found that 38% of the children who have completed four years of schooling cannot read a small paragraph with short sentences meant to be read by a student of Class II. About 55% of such children cannot divide a three digit number by a one digit number. These are indicators of serious learning problems which must be addressed. Several states have started efforts to raise basic skills in a campaign mode. Their experiences need to be evaluated. A set of national testing standards will be created and a chain of institutions that test and evaluate children according to set norms will be established. These will help us to monitor and improve the quality of learning. However, we should also note that just 28% of our schools had electricity in 2005 and only about half had more than two teachers or two classrooms. Only 40% of primary school teachers were graduates and 30% had not even completed Higher Secondary<sup>3</sup>, (EEI, NUEPA, 2006). For a large proportion of our children, school is therefore an ill-lit classroom with more than one class being taught together by someone who may not have completed her own schooling. The monitoring above will need to correlate such facts with learning skills to identify where the real problems lie: teachers, pre-school, state governments, the design of Sarva Sikhsha Abhiyan or the assumed requirements for universal education. Correctives may have to be taken at all these levels.

4.3.8 Our long term goal should be that all schools in India have physical infrastructure and quality of teaching equivalent to Kendriya Vidyalayas. Provision of sports facilities, to the extent possible within school premises must also be ensured. We are very far from this goal at present. One cause for poor quality of teaching is the shortage of teachers reflected in a large number of vacancies. The quality, accountability and motivation of existing teachers are also low. In many areas, teacher absenteeism is a major problem. Teacher training is both inadequate and of poor quality and needs to be expanded and improved.

4.3.9 Empowering panchayats and citizens' education committees to oversee teacher's performance will help increase accountability. The

<sup>3</sup> Elementary Education in India, Analytical Report, NUEPA 2006

management of schools should move away from the highly centralised system of today to a more decentralised one based on local school management committees. These committees comprising of parents and other welleducated people from the neighbourhood will be accountable to the institutions of local self government. Making available ICT solutions, shared management personnel, and management skills with the school committees will be crucial.

4.3.10 Schools are expected to "not just impart education in its narrow sense but, more broadly, to mould children's attitudes. Egalitarian values, compassion, tolerance, concern towards others, respect for cultural diversity, gender sensitivity, and health education must therefore be integrated in the curriculum at the elementary stage itself to help develop healthy attitudes. Gender sensitisation and gender equality must be emphasised early on to help correct the skewed sex ratios and cull all beliefs about inferiority and superiority of sexes.

#### (b) Secondary Education

4.3.11 Universalisation of elementary education alone will not suffice in the knowledge economy. A person with a mere 8 years of schooling will be as disadvantaged in a knowledge economy dominated by ICT as an illiterate person in modern industry and services. Secondary education is vital because it is in this age group that the child, particularly the girl child is extremely vulnerable and is pushed into child labour, early marriage or trafficking. The 11th Plan must therefore aim to progressively raise the minimum level of education to high school or Class X level. The demand for secondary education will also expand significantly as SSA reaches its goal of universal and complete elementary education. A major initiative for expanding secondary education up to Class X, must be initiated in the 11<sup>th</sup> Plan and should include access to organised sports and games. However, the pace at which this expansion takes place will also depend on how quickly we can reduce the drop – out rates at the elementary stage.

4.3.12 The required expansion of secondary education calls for both public and private effort. At present, private aided and unaided schools account for 58% of the total number of secondary schools and 25% of the student population. Clearly with state governments finding it difficult to fund public secondary education, the proportion of private schools has gone up and the relatively better off sections of the population have virtually stopped sending their children to public schools. Yet the latter still absorb 75% of all present secondary school students, a pressure likely to increase as more children from poorer families complete the primary stage. The 11<sup>th</sup> Plan will have to find sufficient resources to end this vicious circle and evolve strategies to significantly expand the number of places in secondary schools, including expansion of intake by private schools wherever this can complement the public effort. The participation of the private sector in a

non commercial manner by involving them in providing facilities like classrooms, laboratories, toilet blocks etc. to government schools will continue to be encouraged. To reward merit, improve mobility, and introduce some competition between schools, it is worth considering a scholarship scheme for bright but poor children who complete primary schooling in public schools that would also be valid in unaided private secondary schools which agree to a common fee structure for the scholarship holders. However, while expansion of private schools should be welcomed, government must bear the responsibility of ensuring that public schools are not only available in areas presently not served or underserved by private schools, but also competitive with private schools where these exist. Special efforts will be made to cater to the educational needs of poor Muslims, SCs, STs and girls whose enrolment is much lower than the general population.

4.3.13 As discussed in the case of elementary schools, it is necessary to also monitor the extent of earning through regular testing by independent bodies. There are strong differences of opinion among educationists on whether parental choice on schools through devices such as vouchers can improve accountability and quality or whether this would only increase existing divides and divert public money to private schools. But parents do need information about quality of their children's schools if they are to have any effective voice in influencing how these

#### are run.

4.3.14 Extension of secondary education in rural areas poses a special challenge since secondary schools cannot be set up in every village. In view of this, the present trend of combining upper primary with secondary school education may need to be strengthened.

#### (c) Technical Vocational Education and Skill Development

4.3.15 Data collected in the 60th round of NSS shows that only 3% of the rural youth (15-29 years) and 6 percent of the urban youth have gone through any kind of vocational training. Most of them have acquired the skills they have from taking up or changing employment. This is much lower than in other developing countries. The current set up for skill formation and upgradation is woefully inadequate. For inclusive growth, it is vital to enhance the productivity of labour in the unorganised sector. We need to expand vocational training from the present capacity of a mere 2 to 3 million to at least 15 million new entrants to the labour force. While we have 5000 Industrial Training Institutes (ITIs) (under the Ministry of Labour) and 7000 Vocational Schools (under the Ministry of HRD), China has about 5,00,000 Secondary Vocational Schools. The 11<sup>th</sup> Plan must pay special attention to devising innovative ways of modernising the ITIs and increasing their number substantially. More importantly, industries and industrial associations will be involved in running them so that the scope and

content of the training provided in these institutions is relevant to the needs of the industry and the job market. The number of skills for which training is provided also needs to be expanded to include new skills. ITIs in India typically cater to around 40 skills compared with 4000 in China.

4.3.16 Since 2004 an effort has been made to identify and implement reforms in administration of ITIs so as to facilitate better interaction with the industry. To begin with 100 ITIs have been taken up and it is proposed to expand the programme to cover 500. However, much more needs to be done to meeting the demands of the knowledge economy. It is necessary to give true financial and administrative autonomy to ITIs that are formally registered societies. These ITIs should be run by independent, qualified professional heads who are accountable to boards consisting of stakeholders, such as user industries and public spirited citizens in the locality. Their performance should be measured by the placements income improvements of the trainees who pass out.

4.3.17 Public Private Partnership models which involve industry representatives in management of ITIs and in design of courses are being tried in some states and need to be encouraged further. There are a number of other vocational training and entrepreneurship development institutes in the country in addition to the ITIs. These institutions also need to be strengthened and a process of accreditation evolved for them. 4.3.18 Vocational training for both men and women should be accorded top priority in the 11<sup>th</sup> Plan. It should be treated as an industry and efforts made to attract private investment into this sector. So far, the private investments have come in only for the higher wage skills - IT, airlines personnel, fashion technology, etc. or for skills linked with government jobs-teachers, instructors, etc. Even these private training institutes are mainly centred around large towns. Small towns that provide avenues for advancement of rural youth have concentrated mainly on academic or college education. It is necessary to encourage a broader based system offering skill enhancement possibilities in smaller towns also.

4.3.19 The possibilities in agroprocessing are increasing. There is however little or no training available in processing of agricultural or forest produce. There exist many government schemes with known technologies that need to be taken to the youth through short courses. Starting agricultural schools with strong agro-processing, irrigation, soil conservation, and forestry/gardening components will thus be one of the goals of the 11<sup>th</sup> plan.

4.3.20 Often vocational training for women is confined to sectors like nursing, sewing etc. in keeping with their traditional roles. If we are to move towards a gender just society, then this has to change. Girls should be encouraged to take up training in secondary and tertiary activities to enable them to compete as equals. 4.3.21 To reach out to rural youth, skill development must be treated at par with school education in allocation of government resources. An initiative at block level for vocational training (VETI) should be taken. VET will be given priority at par with secondary education in allocating public sector financial and physical resources - land and other supportive services

4.3.22 Both public and private institutions should be encouraged to provide training and freedom to train those seeking certification. An appropriate certification system should be instituted by the Central and state governments for certifying the skills of trainees graduating from a variety of institutions and suitable academic credits given to them. The Central Government should provide the necessary guidelines and support for establishing appropriate mechanisms and state governments should institute certification bodies to issue certificates for a variety of skills.

## (d) Higher and Technical Education

4.3.23 India has a well-developed and comprehensive higher education system which has served us well thus far, but is now inadequate. The extent

#### Box No.7 The Emerging Skill Shortage

While India's young demographic profile has the country favourably placed in terms of manpower availability, talent supply shortages are emerging. This is extremely disconcerting especially for the knowledge services sector, which, over the last few years has emerged as a significant growth engine with demonstrated gains in terms of exports, employment and very visibly in urban development across several cities in the country. Research has shown that so far, only a tenth of the global addressable market for these services has been tapped. With its early lead and strong fundamentals (demographics, economics, and expertise), India is best positioned to take advantage of this opportunity. Yet the unsuitability of a large proportion of the talent pool in the country could lead to significant lost opportunities. The NASSCOM-McKinsey Report 2005 projections indicate that these will fall short by about 500,000 suitable professionals (representing an opportunity cost of US\$ 10bn) by the end of the decade and in the absence of corrective action, this gap will continue to grow. However, if current trends are maintained, the IT-ITES sector (IT-ITES) alone of the knowledge sector) will need an additional 1 million plus qualified people in the next 5 years and will generate exports of US \$ 86 billion in FY 2012. If the country is to capitalise on the huge opportunity in this and other areas of knowledge services, what is needed is a major thrust at all levels of education. Clearly, substantial expansion and radical reform of the education sector are called for to ensure that we are able to meet the quality and quantity of professionals needed by the country.

of access it provides is limited. Only about 10% of the relevant age group go to universities whereas in many developing countries, the figure is between 20% and 25%. There is an overwhelming need to undertake major expansion to increase access to higher education. The system also suffers from a serious problem of quality. While some of our institutions of higher education have the potential to become comparable with the best in the world, the average standard is much lower. High quality institutions are finding it difficult to get quality faculty given the enormous increase in private sector opportunities for the skills most in demand.

4.3.24 There are serious shortages of qualified research personnel in educational institutions, in national laboratories and in industrial R&D units. Currently the number of scientists and engineers engaged in R&D in the country is 157 per million. Korea has fifty times more, whereas US & Japan have about thirty times more. At present we produce around 5000 Ph.Ds annually in science and about 800 Ph.Ds in engineering. The Prime Minister's Science Advisory Council has estimated that if India has to lay claim to being a knowledge based economic power, the number of PhDs on quality acceptable by world standards should be five times more than the number that we are currently producing.

4.3.25 These considerations suggests that the 11<sup>th</sup> Plan must undertake a major effort to expand and improve the quality of our higher education system.

In particular, we need to expand higher education in science and create an environment that attracts bright students to careers in science and in R&D. Unless these efforts are made, we will run into skill constraints which will limit our ability to gain competitive advantage in this area (See Box No. 7: The Emerging Skill Shortage). In fact, India should aim to be a global innovation (R&D) hub and a global education hub that attracts students from around the world. Our policies can be fine tuned to achieve this goal.

4.3.26 The regional divide in the matter of educational and R&D institutions is also a matter of concern. Over 60% of these are located in just about 6 to 8 States depending on the segment (for example engineering colleges or biotech R&D labs) one considers. The 11<sup>th</sup> Plan must address these disparities as they greatly influence distribution of employment opportunities. New colleges and universities must be set up, to provide easier access to students in educationally backward districts. Existing institutions must be strengthened and expanded where possible and open and distance education encouraged. In addition, a specific plan for upgrading a few existing select universities with a "potential for excellence" must be formulated, laying down specific parameters which are in tune with global standards. One University in each state should be made a model university through all-round upgradation during the 11<sup>th</sup> Plan. Select state universities should be upgraded to the level of Central Universities, where a share of maintenance expenditure could be met centrally and the State and the Centre could share the development needs. The three oldest universities of Mumbai, Calcutta, and Madras may be taken up in the first instance, in consultation with the respective states so that they could evolve the necessary statutory bases.

4.3.27 Since education is the pathway to economic advancement, the strategy for expanding education must also pay attention to ensuring equitable access. Reservation of seats in educational institutions for SCs and STs, and in many states also for OBCs has been in place for many years. The Centre is taking steps to introduce reservation for OBCs in central universities and other central institutions of higher learning such as IITs, IIMs etc. It has also been decided that the proposed reservation will be introduced in a manner which ensures that there is no reduction of seats in the general category. This involves substantial expansion of seats which was overdue. The details of the scheme will be finalised shortly and the government will ensure that resources are provided to these institution to enable the neccessary expansion in a manner which does not compromise on quality.

4.3.28 Expanding the scale of higher education is only one part of the solution. The 11<sup>th</sup> Plan must simultaneously address the problems of varying standards, outdated syllabi and also inadequate facilities. Most of all, it must address the need to create an environment that will attract top class faculty to our universities, with the freedom and resources to interact effectively with their global peers. This will require, in many respects, a complete revamping of existing systems. 4.3.29The triple objectives of expansion, inclusion and excellence will require a substantial increase in resources devoted to this sector by both the Centre and the states. Successive annual plans will have to provide rising levels of budgetary support. This must be accompanied by internal resource generation by the universities by realistically raising fees. Simultaneously, efforts will be made to develop wider merit-cum-means based loan and scholarship programmes through the banking system and other agencies. The National Merit Scholarship Scheme needs to be expanded to cover at least the top 2 per cent of the student population in fields of education and skill training. We should also strive to increase the scope of scholarships to SC/ST children.

4.3.30 While it is important to expand access to high quality institutions for the poor and socially disadvantaged, it is also important to recognise that the ability to benefit from higher education is effectively determined by the quality of schooling available to these groups at the school level. The access of those groups to high quality schooling must therefore be improved to ensure that they are not at a disadvantage when they enter institutions of higher education. 4.3.31 The open university system is an important instrument for expanding higher education since it overcomes the infrastructure constraint. Until a larger network of accessible and well supported colleges is developed, the open schooling programme should be strengthened and expanded. In case of subjects that do not require laboratory work it will be helpful for students to access prerecorded selection of lectures, tutorials, and standardised tests available at internet kiosks. Testing and examination centres where students can take standardised examinations in parts can reduce the pressure. For this autonomous charged institutions with the responsibility of testing and examination will have to be developed. The 11<sup>th</sup> plan should pay attention to creation of electronically available content and testing mechanisms so that the pressure on infrastructure can be eased.

4.3.32 The role of the private sector in providing high quality education also needs to be recognised and a suitably facilitative environment created to allow such institutions to support our objectives of expanding higher education. Since, these institutions are neither aided by the Centre nor by the state governments, their fee structure cannot be expected to be at par with those aided by the Centre/state governments. The present arrangements regarding control over private education institutions have emerged out of a series of court decisions and may not reflect an adequate appreciation of financial compulsions. Private institutions can only develop if they are allowed to charge reasonable fees while also providing need based freeships and scholarships for a certain percentage of students. There is a need to review the system comprehensively to introduce greater clarity and transparency if we want to see a healthy development of quality private sector education.

#### (e) Adult Literacy Programmes

4.3.33 The 10<sup>th</sup> Plan target of attaining 75% literacy rate is likely to be achieved by 2007. The Dakar goal of halving the illiteracy rate by 2015 will thus be achieved ahead of time However, bridging of regional, social. and gender gaps will continue to be major areas of concern.

4.3.34 Our aim is to increase adult literacy to 85% by the end of the 11<sup>th</sup> Plan period of the 30 crore adult illiterates in our country, a significant proportion is not covered under any adult education programme. A programme using the new computer based self-learning system will be framed for the 35+ age group.

4.3.35 Currently literacy programmes cover 598 out of 600 districts in the country. The Mid-term Appraisal of the 10<sup>th</sup> Plan pointed out the need for merger of various adult literacy programmes including the Total Literacy Campaign. The quality of the various programmes initiated by the NGOs will be assessed through regular monitoring, and central and state governments will evolve an accreditation process. The NYKS network, synergised with the PRI network, will be fully utilised through the Panchayat Yuva Shakti Abhiyan to fulfill the goals of adult literacy under the overall umbrella of the Total Literacy Campaign. 4.3.36 Adult literacy as we measure it today is not an adequate indicator

of the level of functional literacy that is required in the new millennium. A computer based functional literacy tool developed by Tata Consultancy Services (TCS) has the capacity to make an adult illiterate read a newspaper in 8-10 weeks. If deployed nationally as a mission, India can become 100% literate within 5 years. SAC-PM has recommended that this be taken up as a national mission. We must commit ourselves to a much higher level of literacy through continuing education programme. The 11<sup>th</sup> plan will, as a separate stream, create workable models of continuing education.

# (f) The Cutting Edge: Science and Technology

4.3.37 In the current knowledge era, our development depends crucially on the ability to harness science and technology to stimulate innovative solutions. Capabilities in S&T therefore are reckoned as a reliable benchmark for establishing the status of the development of a nation. India must occupy a frontline position in this listing. The 11<sup>th</sup> Five Year Plan approach to S&T should be guided by this ambition. The emphasis should be on:

- (i) Evolving an integrated S&T Plan and providing the needed resources, substantially stepping up support to basic research, setting up a National Level mechanism for evolving policies and providing direction to basic research.
- (ii) Enlarging the pool of scientific manpower and strengthening the S&T infrastructure. Focused efforts will be made to identify and

nurture bright young students who can take up scientific research as a career. Restructuring and revamping the universities and improving the service conditions of the scientists is a concomitant requirement for this.

- (iii) Implementing selected National Flagship Programmes which have direct bearing on the technological competitiveness of the country in a mission mode so that India emerges as a leader in some high technology areas.
- (iv) Establishing globally competitive research facilities and centres of excellence. Kindling innovative spirit so that scientists translate R&D leads into scalable technologies which yield wealth generating products and processes. Attention will have to be paid to the development of new models of public-private partnerships in higher education, and in particular, in research in universities and high technology areas.
- (v) Identifying ways and means for catalysing Industry-academia collaborations for development, application and flow of technologies from lab to the market place and for the industry to invest more in strengthening national S&T infrastructure.
- (vi) Promoting strong linkages with other countries in the area of science and technology including participation in mega international science initiatives.
- (vii) Evolving an empowered National Science and Technology Commission

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responsible for all matters relating to S&T (Administrative, Financial, Scientific) including scientific audit and performance measurement of scientists and scientific institutions.

4.3.38 Culture is an integrating force that binds the nation and it is reflected in people's daily life and should be treated as an integral part of all development programmes. Given the continental size of the country, the monumental diversity of its people and their languages, the plurality of faiths and belief systems, conservation and promotional activities of cultural heritage call for ensuring dissemination of our composite culture, special efforts are required to promote all regional languages, to sustain the folk and traditional art, and to maintain, document, research and propagate dissemination of the intangible cultural heritage. Also a system needs to be evolved (with involvement of PRIs) to protect monuments not protected by ASI.

## 4.4 A Comprehensive Strategy for Better Health

4.4.1 The 10<sup>th</sup> Plan aimed at providing essential primary health care, particularly to the underprivileged and underserved segments of our population. It also sought to devolve responsibilities and funds for health care to PRIs. However, progress towards these objectives has been slow and the targets on MMR & IMR have been missed. Accessibility remains a major issue especially in areas where habitations are scattered and women and children continue to die en route to hospitals. Rural health care in most states is marked by absenteeism of doctors/health providers, low levels of skills, shortage of medicines, inadequate supervision/monitoring and callous attitudes. There are neither rewards for service providers nor punishments for defaulters. As a result, health outcomes in India are adverse compared to bordering countries like Sri Lanka as well as countries of South East Asia like China and Vietnam (See Table 6).

	India	Sri Lanka	China	Vietnam
Infant mortality	60	13	30	19
(per 1000 live births)	(2003)	(2003)	(2003)	(2003)
One year olds fully immu-	58	99	84	93
nised for measles (%)	(2002-04)	(2003)	(2003)	(2003)
Population with sustainable	30	91	44	41
access to improved sanitation (%)	(2002)	(2002	(2002)	(2002)
Under-five mortality	87	15	37	23
(per 1000 live births)	(2003)	(2003)	(2003)	(2003)
Births attended by skilled birth	47.6	97	97	85
attendants (%)	(2002-04)	(1995-2003)	(1995-2003)	(1995-2003)
Maternal mortality	407	92	56	130
(per 100,000 deliveries)	(adjusted 2000)	(adjusted 2000)	(adjusted 2000)	(adjusted 2000)

#### **Table 6: India and Comparable Countries**

The Primary Teacher: January and April 2008

4.4.2 Achievement of health objectives involves much more than curative or even preventive medical care. We need a comprehensive approach which encompasses individual health care, public health, sanitation, clean drinking water, access to food and knowledge about hygiene and feeding practice. This is a difficult area because of our sociocultural complexities and also regional diversity. Policy interventions therefore have to be evidence based and responsive to area specific differences. With concerted action including enabling pregnant women to have institutional deliveries and receive nutritional supplements;

connecting PHCs and CHCs by all weather roads so that they can be reached quickly in emergencies; (accessibility to hospital should be measured in terms of travel time, not just distance from nearest PHC); providing home-based neo natal care induding emergency life saving measures etc, we can be on track to reach the Millennium Development Goals for IMR, MMR and for combating diseases by the end of the 11<sup>th</sup> Plan.

4.4.3 To improve the primary health care system, the 11<sup>th</sup> Plan will first lay emphasis on integrated district health plans and second, on block specific health plans. These plans will ensure

#### Box No.8

#### The National Rural Health Mission

The National Rural Health Mission is expected to address the gaps in the provision of effective health care to rural population with special focus on 18 States, which have weak public health indicators and/or weak infrastructure.

The Mission is a shift away from the vertical health and family welfare programmes to a new architecture of all inclusive health development in which societies under different programmes will be merged and resources pooled at the district level.

It aims at effective integration of health concerns with determinants of health like safe drinking water, sanitation and nutrition through integrated District Plans for Health.There is a provision for flexible funds so that the States can utilise them in the areas they feel are important.

The Mission provides for appointment of Accredited Social Health Activist (ASHA) in each village and strengthening public health infrastructure, including outreach through mobile clinics. It emphasises involvement of the non-profit sector, especially in the under served areas: It also aims at flexibility at the local level by providing for untied funds.

The Mission, in its supplementary strategies, will aim at fostering public-private partnerships; regulating the private sector to improve equity and reduce out of pocket expenses; introducing effective risk pooling mechanisms and social health insurance; and taking advantage of local health traditions. involvement of all health related sectors and emphasize partnership with NGOs. The NRHM has already been launched to ensure quality health care in rural areas. The next step should be to extend this to make it a Sarva Swasthya Abhiyan that also covers the health needs of the urban poor, particularly the slum dwellers by investing in high calibre health professionals and appropriate technology.

4.4.4 Besides reducing the burden and the level of risk of existing, growing and emerging diseases, the 11<sup>th</sup> Plan will also take care of the special needs of people who are HIV positive, particularly women. The 11<sup>th</sup> Plan will recognise the feminine face of HIV and accord it the highest priority.

4.4.5 The 11<sup>th</sup> Plan will continue to advocate fertility regulation through voluntary and informed consent. It will also address the special healthcare needs of the elderly, especially those who are economically and socially vulnerable.

#### (a) National Rural Health Mission

4.4.6 A seven year National Rural Health Mission (NRHM), which spans the duration of the 11<sup>th</sup> Plan, has been launched to address infirmities and problems across rural primary health care (See Box No.8). Converging the public health approach with primary health care has been one of the primary objectives of this mission. Another objective is to genuinely empower and support Panchayati Raj Institutions to manage, administer, and be accountable for health services at community levels. Supervision of health subcentres by gram panchayats will improve attendance of staff, motivate appropriate quality of care and provide constant feedback on patient satisfaction. The NRHM will also converge the management of health delivery across all systems of medicine (including ISM) at primary health care levels.

4.4.7India has its own well developed indigenous systems of health care like ayurveda, yoga, siddha, unani etc, along with diverse ecosystem specific, local health traditions. These systems could be used to complement the allopathic system, as they could be more useful in certain areas of curative/preventive health care. This would enhance the quality and outreach of public health services, which are currently unable to meet the health needs of our people. However, care would have to be taken to ensure that we do not substitute the allopathic system of health care in areas like immuniszation, etc where it has no alternative.

4.4.8 At present, our healthcare system suffers from a severe shortage of trained personnel. Across states, 6.30% posts of doctors remain vacant and random checks show that 29-67% doctors are absent. One way of overcoming the difficulty in recruiting qualified doctors to serve in rural areas is to make greater use of trained paramedical personnel. There is a strong case for reintroducing the 2 year licentiate course in medicine which existed earlier but was abolished. We also need to devise ways of training and accrediting the rural health providers (popularly called RMPs) and permitting them to provide select services under the supervision of a licensed medical practitioner.

#### (b) Disability and Mental Health

4.4.9 Coping with challenges of living in a rapidly developing society and increasing exposure to a violent world has led to a perceptible increase in mental stress. Provision of mental health care is thus vital. From the children of farmers who commit suicide to victims of violence, calamities and sexual abuse, all need counselling support. Yet this has been a much neglected area in our country. Even today there is a stigma attached to mental illness which prevents many from reaching out. The 11<sup>th</sup> Plan should recognise the importance of mental health care and should concentrate on providing counselling, medical services and establishing helplines for all – especially people affected by calamities, riots and violence. Adequate budgetary provisions will be made available for this purpose.

4.4.10 The 2001 Census reveals that 2.13% of our population or approximately 2.19 crore people in India suffer from severe disability. The 11<sup>th</sup> Plan will take special measures to not just prevent discrimination against the disabled, especially children with disability, but also introduce policies to empower them and enable them to lead a life of dignity. The Persons with Disability (Equality Opportunities, Protection of Rights and Full Participation) Act, 1995 which provides various entitlements to persons with disability will be effectively operationalised.

#### (c) Financing Health Services

4.4.11 Energising health systems involves additional government expenditure. The existing level of government expenditure on health in India is just under 1 percent which is unacceptably low and effort should be made to increase the total expenditure at the Centre and the states to 2-3% of GDP. This must be accompanied by innovative financing mechanisms which incentivise performance. The quality of publicly supplied healthcare depends on how healthcare providers are paid. Providers should be paid only if they actually perform a service or satisfy the customer (the patient or the village health committee). Such systems linking payment to performance will increase accountability and should be encouraged.

4.4.12 The 11<sup>th</sup> Plan should experiment with different systems of private-public partnership, of which many examples already exist in some states. We could explore the possibility of an entitlement system for pregnant women to have professionally supervised deliveries. This will empower them to exercise choice, as well as create competition in the health service sector. Contracting out wellspecified and delimited projects such as immunisation can help enhance accountability. This does not mean that the state will withdraw from the health sector. Studies across the country have shown that expenditure on healthcare is a primary cause of indebtedness. Due to inadequate and non-performing public health infrastructure, the poor are forced to approach private' practitioners who charge exorbitant fees. It is thus vital to ensure access to functioning public sector healthcare facilities.

4.4.13 Experience has shown that severe ill health can lead to disastrous outcomes for individuals and their families especially for the poor. These problems are best handled by health insurance. Community Based Health Insurance (CBHI) is emerging as a promising concept and existing experience in different states has shown that well managed prepayment systems with risk pooling are effective in protecting the poor from impoverishment due to high medical costs during catastrophic health events. CBHI initiatives based on some individual contributions to the premium, plus a government subsidy, deserve to be supported as they would improve the quality of healthcare and expand the healthcare interventions as per requirements. We also need to look at alternative approaches such as comprehensive risk pooling packages through the public system and through accredited private providers. This is possibly an area where multiple experiments need to be encouraged so that we can come to firmer conclusions about what model will work best.

#### (d) Clean Water for All

4.4.14 Water-borne infections hamper absorption of food even when intake is sufficient. Clean drinking water is therefore vital to reduce the incidence of disease and to check malnutrition. The 10<sup>th</sup> Plan target of providing potable drinking water to all villages has not been achieved. Under Bharat Nirman, we now plan to cover the 55067 uncovered habitations in 4 years (2005-09). Rural Water Supply is, however, beset with the problem of sustainability, maintenance, and water quality. Thus though more than 95% coverage was achieved prior to Bharat Nirman, 2.8 lakh out of the 14.22 lakh habitations in the country, have slipped back from fully covered to partially covered status. Another 2.17 lakh habitations have problems with the quality of water; about 60,000 habitations face serious problems of salinity or arsenic and fluoride contamination. These habitations will also be taken up under Bharat Nirman. The 11<sup>th</sup> Plan will emphasise full and timely realisation of the Bharat Nirman targets.

4.4.15 The 11<sup>th</sup> Plan will also address issues of sustainability by moving away wherever possible from ground water to surface water resources. Where alternate sources do not exist, or are not cost effective, ground water recharge measures will be insisted upon in the vicinity of the project.

4.4.16 The Plan will move away from state implemented and managed projects to encourage community owned and managed projects, like the Swajaldhara Programme. In the 10<sup>th</sup> Plan, Swajaldhara had a limited provision of 20% of the allocation of the Accelerated Rural Water Supply Programme (ARWSP). It will need to be upscaled so that more and more schemes are community managed, reducing the maintenance burden and responsibility of the state. For this purpose, the states will have to fully utilise the funds provided by the 12<sup>th</sup> Finance Commission.

#### (e) Sanitation

4.4.17 Rural sanitation coverage was only 1% in the 1980s. With the launch of the Central Rural Sanitation Programme in 1986, the coverage improved to 4% in 1988 and then to 22% in 2001. The programme was modified as Total Sanitation Campaign in 1999 changing the earlier supply driven. high subsidy and departmentally executed programme to a low subsidy, demand driven one, with emphasis on hygiene education. Five hundred and forty districts are covered under this programme and the population coverage is expected to increase to about 35% by the end of the 10<sup>th</sup> Plan.

4.4.18 Lack of sanitation is directly linked to a number of waterborne diseases. It is now generally acknowledged that unless 100% coverage of the community is achieved and proper solid waste management carried out, health indicators will not show significant improvement. Besides, toilets are essential for the dignity and safety of girls and women. The subsidy regime in the current programme is only for BPL families. For full coverage to be achieved however, APL families will have to be motivated to switch over from open defecation to use of toilets. The Information, Education, and Communication (IEC) campaign will therefore receive increased attention in the 11<sup>th</sup> Plan. Meanwhile, the cost norms for individual household toilets are already being revised and a solid waste management component is being included in the programme. These measures coupled with a focused IEC campaign will significantly increase sanitation coverage in the 11<sup>th</sup> Plan.

4.4.19 Steps are also being taken to link rural sanitation with the rural health mission. The Nirmal Gram Puraskar, a reward scheme for 100% open defecation free communities has been a motivating factor and is picking up momentum as can be seen from the number of communities competing for the Puraskar. With sufficient allocation of funds in the 11<sup>th</sup> Plan, the MDG goal for sanitation can be met by 2010, and full coverage achieved between 2012 and 2015.